

Ceramide Transfer Protein (CERTL). Rabbit Polyclonal Antibody

Lipid-transfer protein CERT, Goodpasture antigen-binding protein isoform 2, GPBP26, GPBP, Collagen type IV alpha-3-binding protein, StAR-related lipid transfer protein 11, StARD11, START domain-containing protein 11, COL4A3BP, STARD11

BACKGROUND

CERT mediates the ATP-dependent ER-to-Golgi transfer of ceramide in a non-vesicular manner. The biosynthesis of lipids involves steps that occur in different intracellular compartments. The movement of lipids within these compartments is important in lipid-mediated signalling. Human CERT is identical to a splice variant of human Goodpasture antigenbinding protein (GPBP26).

CERT contains a phosphoinositide-binding pleckstrin-homology (PH) domain (which targets CERT to the Golgi by binding phosphatidylinositol -4-phosphate (PtdIns4P)), a middle region, and a putative lipid-transfer-catalysing domain called START. CERT and CERTL can specifically extract ceramide from phospholipid bilayers in a START-domaindependent manner. CERT interacts with ER membranes and specifically extracts ceramide. CERT catalyses both the specific extraction of ceramide from donor vesicles and its transfer to acceptor vesicles. CERT can associate with the Golgi in a PtdIns4P dependent manner.

ORDERING INFORMATION

CATALOG NUMBER

X2089P

SIZE

 $100 \mu g$

FORM

Unconjugated

HOST/CLONE

Rabbit

FORMULATION

Provided as solution in phosphate buffered saline with 0.08% sodium azide

CONCENTRATION

See vial for concentration

ISOTYPE

IgG

APPLICATIONS

Western Blot

SPECIES REACTIVITY Human

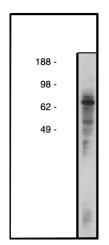
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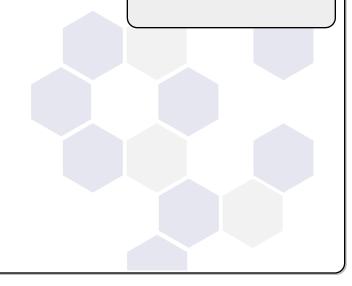
Human Q9Y5P4

IMMUNOGEN

Synthetic peptide derived from human CERTL protein

Western blot using CERTL antibody (Cat. No. X2089P) on HT-29 cell lysate (28 μ g/lane). Primary antibody used at $10\mu g/ml$. Secondary antibody, mouse anti-rabbit HRP (Cat. No. X1207M), used at 1:50k.





Positive Control/Tissue Expression

Ovary

COMMENTS

Antibody can be used for Western blotting (5-10 μ g/ml starting dilution). Optimal concentration should be evaluated by serial dilutions.

PURIFICATION

Ammonium Sulfate Precipitation

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

- 1. Hanada K., Kumagai K., Yasuda S., Miura Y., Kawano M., Fukasawa M., Nishijima M.; Molecular machinery for non-vesicular trafficking of ceramide.; Nature 426:803-809(2003).
- 2. Raya A., Revert F., Navarro S., Saus J.; Characterization of a novel type of serine/threonine kinase that specifically phosphorylates the human goodpasture antigen.; J. Biol. Chem. 274:12642-12649(1999).
- 3. Raya A., Revert-Ros F., Martinez-Martinez P., Navarro S., Rosello E., Vieites B., Granero F., Forteza J., Saus J.; Goodpasture antigen-binding protein, the kinase that phosphorylates the Goodpasture antigen, is an alternatively spliced variant implicated in autoimmune pathogenesis.; J. Biol. Chem. 275:40392-40399(2000).
- 4. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC).; Genome Res. 14:2121-2127(2004).
- 5. Ogi T., Yamamoto Y., Ohmori H.; Homo sapiens genomic sequence, containing DINB1 and GPBP gene.; Submitted (JAN-2000) to the EMBL/GenBank/DDBJ databases.
- 6. Olsen J.V., Blagoev B., Gnad F., Macek B., Kumar C., Mortensen P., Mann M.; Global, in vivo, and site-specific phosphorylation dynamics in signaling networks.; Cell 127:635-648(2006).

PRODUCT SPECIFIC REFERENCES